



RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/500,477
Source: PT/10
Date Processed by STIC: 7/8/04

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.2 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom. Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm>) , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 06/05/04):
U.S. Patent and Trademark Office, 220 20th Street S., Customer Window, Mail Stop Sequence, Crystal Plaza Two, Lobby Room 1B03, Arlington, VA 22202

Revised 05/17/04



PCT

RAW SEQUENCE LISTING

DATE: 07/08/2004

PATENT APPLICATION: US/10/500,477

TIME: 15:58:17

Input Set : A:\01-SQ Listing-29 Jun 2004.txt

Output Set: N:\CRF4\07082004\J500477.raw

3 <110> APPLICANT: Pettersson, Dan
 4 Wu, Wenping
 5 Fuglsang, Claus
 7 <120> TITLE OF INVENTION: Thermostable Enzyme Compositions
 9 <130> FILE REFERENCE: 10254.204-US
 C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/500,477
 C--> 11 <141> CURRENT FILING DATE: 2004-06-29
 11 <160> NUMBER OF SEQ ID NOS: 16
 13 <170> SOFTWARE: PatentIn version 3.2
 15 <210> SEQ ID NO: 1
 16 <211> LENGTH: 1008
 17 <212> TYPE: DNA
 18 <213> ORGANISM: Thermoascus aurantiacus
 21 <220> FEATURE:
 22 <221> NAME/KEY: sig_peptide
 23 <222> LOCATION: (1)..(90)
 25 <400> SEQUENCE: 1
 26 atgaagctcg gctctctcgt gctcgctctc agcgcagcta ggcttacact gtcggccctt 60
 28 ctgcgcagaca gaaagcagga gaccaagcgt gcgaaagtat tccaatgggt cggttcgaac 120
 30 gagtccgggtg ctgaattcgg aagccagaac cttccaggag tcgagggaaa ggattatata 180
 32 tggcctgatc ccaacaccat tgacacattg atcagcaagg ggatgaacat ctttcgtgtc 240
 34 ccctttatga tggagagatt ggttcccaac tcaatgaccg gctctccgga tccgaactac 300
 36 ctggcagatc tcatagcgac tgtaaagtca atcaccaga aaggtgccta cgccgtcgtc 360
 38 gatcctcata actacggcag atactacaat tctataatct cgagcccttc cgatttccag 420
 40 accttctgga aaacggtcgc ctacagttt gcttcgaatc cactgggtcat ctccgacact 480
 42 aataacgaat accacgatat ggaccagacc ttagtcctca atctcaacca ggccgctatc 540
 44 gacggcatcc gtcccgccgg agccacttcc cagtacatct ttgtcgaggg caattcgtgg 600
 46 accggggcat ggacctggac gaacgtgaac gataacatga aaagcctgac cgacccatct 660
 48 gacaagatca tatacgagat gcaccagtac ctggactctg acggatccgg gacatcagcg 720
 50 acctgcgtat ctccgacat cggatcaagag cgaatcacca gcgcaacgca gtggctcagg 780
 52 gccaacggga agaagggcat catcggcgag tttgcgggag gagccaacga cgtctgcgag 840
 54 acggccatca cgggcatgct ggactacatg gccagaaca cagacgtctg gactggcgcc 900
 56 atctggtggg cggccggggc gtggtgggga gactacatat tctccatgga gccggacaat 960
 58 ggcacgcgt atcagcagat acttcctatt ttgactccgt atctttga 1008
 61 <210> SEQ ID NO: 2
 62 <211> LENGTH: 335
 63 <212> TYPE: PRT
 64 <213> ORGANISM: Thermoascus aurantiacus
 67 <220> FEATURE:
 68 <221> NAME/KEY: SIGNAL
 69 <222> LOCATION: (1)..(30)
 71 <400> SEQUENCE: 2
 73 Met Lys Leu Gly Ser Leu Val Leu Ala Leu Ser Ala Ala Arg Leu Thr

Does Not Comply
Corrected Dikette Needer
3-4

RAW SEQUENCE LISTING

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Input Set : A:\01-SQ Listing-29 Jun 2004.txt

Output Set: N:\CRF4\07082004\J500477.raw

```

74 1          5          10          15
77 Leu Ser Ala Pro Leu Ala Asp Arg Lys Gln Glu Thr Lys Arg Ala Lys
78          20          25          30
81 Val Phe Gln Trp Phe Gly Ser Asn Glu Ser Gly Ala Glu Phe Gly Ser
82          35          40          45
85 Gln Asn Leu Pro Gly Val Glu Gly Lys Asp Tyr Ile Trp Pro Asp Pro
86          50          55          60
89 Asn Thr Ile Asp Thr Leu Ile Ser Lys Gly Met Asn Ile Phe Arg Val
90 65          70          75          80
93 Pro Phe Met Met Glu Arg Leu Val Pro Asn Ser Met Thr Gly Ser Pro
94          85          90          95
97 Asp Pro Asn Tyr Leu Ala Asp Leu Ile Ala Thr Val Asn Ala Ile Thr
98          100          105          110
101 Gln Lys Gly Ala Tyr Ala Val Val Asp Pro His Asn Tyr Gly Arg Tyr
102          115          120          125
105 Tyr Asn Ser Ile Ile Ser Ser Pro Ser Asp Phe Gln Thr Phe Trp Lys
106          130          135          140
109 Thr Val Ala Ser Gln Phe Ala Ser Asn Pro Leu Val Ile Phe Asp Thr
110 145          150          155          160
113 Asn Asn Glu Tyr His Asp Met Asp Gln Thr Leu Val Leu Asn Leu Asn
114          165          170          175
117 Gln Ala Ala Ile Asp Gly Ile Arg Ser Ala Gly Ala Thr Ser Gln Tyr
118          180          185          190
121 Ile Phe Val Glu Gly Asn Ser Trp Thr Gly Ala Trp Thr Trp Thr Asn
122          195          200          205
125 Val Asn Asp Asn Met Lys Ser Leu Thr Asp Pro Ser Asp Lys Ile Ile
126          210          215          220
129 Tyr Glu Met His Gln Tyr Leu Asp Ser Asp Gly Ser Gly Thr Ser Ala
130 225          230          235          240
133 Thr Cys Val Ser Ser Thr Ile Gly Gln Glu Arg Ile Thr Ser Ala Thr
134          245          250          255
137 Gln Trp Leu Arg Ala Asn Gly Lys Lys Gly Ile Ile Gly Glu Phe Ala
138          260          265          270
141 Gly Gly Ala Asn Asp Val Cys Glu Thr Ala Ile Thr Gly Met Leu Asp
142          275          280          285
145 Tyr Met Ala Gln Asn Thr Asp Val Trp Thr Gly Ala Ile Trp Trp Ala
146          290          295          300
149 Ala Gly Pro Trp Trp Gly Asp Tyr Ile Phe Ser Met Glu Pro Asp Asn
150 305          310          315          320
153 Gly Ile Ala Tyr Gln Gln Ile Leu Pro Ile Leu Thr Pro Tyr Leu
154          325          330          335
157 <210> SEQ ID NO: 3
158 <211> LENGTH: 21
159 <212> TYPE: PRT
160 <213> ORGANISM: Thermoascus aurantiacus
163 <220> FEATURE:
164 <221> NAME/KEY: MISC_FEATURE
165 <223> OTHER INFORMATION: N-terminal peptide
167 <220> FEATURE:

```

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Input Set : A:\01-SQ Listing-29 Jun 2004.txt

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168 <221> NAME/KEY: MISC_FEATURE
 169 <222> LOCATION: (2)..(2)
 170 <223> OTHER INFORMATION: Xaa in position 2 means any amino acid
 172 <400> SEQUENCE: 3
 W--> 174 Asn Xaa Leu Val Phe Thr Ser Phe Gly Ser Asn Glu Ser Gly Ala Glu
 175 1 5 10 15
 178 Phe Gly Ser Gln Asn
 179 20

182 <210> SEQ ID NO: 4

183 <211> LENGTH: 20

184 <212> TYPE: DNA

185 <213> ORGANISM: Artificial

187 <220> FEATURE:

188 <223> OTHER INFORMATION: Primer

191 <220> FEATURE:

192 <221> NAME/KEY: misc_feature

193 <223> OTHER INFORMATION: K means T or C

195 M means A or G

197 N means T or C or A or G

199 <220> FEATURE:

200 <221> NAME/KEY: misc_feature

201 <222> LOCATION: (9)..(9)

202 <223> OTHER INFORMATION: n is a, c, g, or t

204 <220> FEATURE:

205 <221> NAME/KEY: misc_feature

206 <222> LOCATION: (12)..(12)

207 <223> OTHER INFORMATION: n is a, c, g, or t

209 <220> FEATURE:

210 <221> NAME/KEY: misc_feature

211 <222> LOCATION: (15)..(15)

212 <223> OTHER INFORMATION: n is a, c, g, or t

214 <400> SEQUENCE: 4

W--> 215 aakgamtcng gngcngaatt

20

218 <210> SEQ ID NO: 5

219 <211> LENGTH: 20

220 <212> TYPE: DNA

221 <213> ORGANISM: Artificial

223 <220> FEATURE:

224 <223> OTHER INFORMATION: Primer

227 <220> FEATURE:

228 <221> NAME/KEY: misc_feature

229 <223> OTHER INFORMATION: K means T or C

231 M means A or G

233 N means T or C or A or G

235 <220> FEATURE:

236 <221> NAME/KEY: misc_feature

237 <222> LOCATION: (9)..(9)

238 <223> OTHER INFORMATION: n is a, c, g, or t

240 <220> FEATURE:

K can only mean G or T

Y represents T or C

M means A or G

R means A or G

K means G or T

M means A or C

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```

241 <221> NAME/KEY: misc_feature
242 <222> LOCATION: (12)..(12)
243 <223> OTHER INFORMATION: n is a, c, g, or t
245 <220> FEATURE:
246 <221> NAME/KEY: misc_feature
247 <222> LOCATION: (15)..(15)
248 <223> OTHER INFORMATION: n is a, c, g, or t
250 <400> SEQUENCE: 5
W--> 251 aakgamtcng gngcngagtt 20
254 <210> SEQ ID NO: 6
255 <211> LENGTH: 20
256 <212> TYPE: DNA
257 <213> ORGANISM: Artificial
259 <220> FEATURE:
260 <223> OTHER INFORMATION: Primer
263 <220> FEATURE:
264 <221> NAME/KEY: misc_feature
265 <223> OTHER INFORMATION: K means T or C
267 M means A or G A or C
269 N means T or C or A or G
271 <220> FEATURE:
272 <221> NAME/KEY: misc_feature
273 <222> LOCATION: (12)..(12)
274 <223> OTHER INFORMATION: n is a, c, g, or t
276 <220> FEATURE:
277 <221> NAME/KEY: misc_feature
278 <222> LOCATION: (15)..(15)
279 <223> OTHER INFORMATION: n is a, c, g, or t
281 <400> SEQUENCE: 6
W--> 282 aakgamagkg gngcngaatt 20
285 <210> SEQ ID NO: 7
286 <211> LENGTH: 20
287 <212> TYPE: DNA
288 <213> ORGANISM: Artificial
290 <220> FEATURE:
291 <223> OTHER INFORMATION: Primer
294 <220> FEATURE:
295 <221> NAME/KEY: misc_feature
296 <223> OTHER INFORMATION: K means T or C
298 M means A or G A or C
300 N means T or C or A or G
302 <220> FEATURE:
303 <221> NAME/KEY: misc_feature
304 <222> LOCATION: (12)..(12)
305 <223> OTHER INFORMATION: n is a, c, g, or t
307 <220> FEATURE:
308 <221> NAME/KEY: misc_feature
309 <222> LOCATION: (15)..(15)
310 <223> OTHER INFORMATION: n is a, c, g, or t

```

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312 <400> SEQUENCE: 7
W--> 313 aakgamagkg gngcngagtt 20
316 <210> SEQ ID NO: 8
317 <211> LENGTH: 18
318 <212> TYPE: DNA
319 <213> ORGANISM: Artificial
321 <220> FEATURE:
322 <223> OTHER INFORMATION: Primer
324 <400> SEQUENCE: 8
325 aagatgtact gggaagtg 18
328 <210> SEQ ID NO: 9
329 <211> LENGTH: 21
330 <212> TYPE: DNA
331 <213> ORGANISM: Artificial
333 <220> FEATURE:
334 <223> OTHER INFORMATION: Primer
336 <400> SEQUENCE: 9
337 tggttgagat tgaggactaa g 21
340 <210> SEQ ID NO: 10
341 <211> LENGTH: 21
342 <212> TYPE: DNA
343 <213> ORGANISM: Artificial
345 <220> FEATURE:
346 <223> OTHER INFORMATION: Primer
348 <400> SEQUENCE: 10
349 gattatagaa ttgtagtatc t 21
352 <210> SEQ ID NO: 11
353 <211> LENGTH: 19
354 <212> TYPE: DNA
355 <213> ORGANISM: Artificial
357 <220> FEATURE:
358 <223> OTHER INFORMATION: Primer
360 <400> SEQUENCE: 11
361 agagccggtc attgagttg 19
364 <210> SEQ ID NO: 12
365 <211> LENGTH: 20
366 <212> TYPE: DNA
367 <213> ORGANISM: Artificial
369 <220> FEATURE:
370 <223> OTHER INFORMATION: Primer
372 <400> SEQUENCE: 12
373 atgaagctcg gctctctcgt 20
376 <210> SEQ ID NO: 13
377 <211> LENGTH: 21
378 <212> TYPE: DNA
379 <213> ORGANISM: Artificial
381 <220> FEATURE:
382 <223> OTHER INFORMATION: Primer
384 <400> SEQUENCE: 13

```

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/500,477

DATE: 07/08/2004
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:3; Xaa Pos. 2
Seq#:4; N Pos. 9, 12, 15
Seq#:5; N Pos. 9, 12, 15
Seq#:6; N Pos. 12, 15
Seq#:7; N Pos. 12, 15

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete,
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:4,5,6,7,8,9,10,11,12,13

VERIFICATION SUMMARY

DATE: 07/08/2004

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Input Set : A:\01-SQ Listing-29 Jun 2004.txt

Output Set: N:\CRF4\07082004\J500477.raw

L:11 M:270 C: Current Application Number differs, Replaced Current Application No
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:174 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0
L:215 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0
L:251 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0
L:282 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0
L:313 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0